Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0002 Sutter Maintenance Yard East Levee	Overall LMA Rating	Total LMA Miles	* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.						
Sutter Bypass	M *	21.68	nce Deficiancy					Design & System	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles		Obsole M Miles	U Miles	
Earthen Levee	1111111100	C IVIIICO		71110011010 70	W W	0 1111100	111 1111100	0 1111100	
Vegetation	0.32		0.32	1.48%					
Encroachments						0.01			
Animal Control	0.03	0.01	0.07	0.32%					
Slope Stability	0.03		0.03	0.14%					
Supplemental									
2015 USACE Erosion Survey, DRAFT	0.03		0.03	0.14%					
DWR UCIP Field Study					0.11	0.03			
LMA Totals:	0.41	0.01	0.45	2.08% *	0.11	0.04	0.00	0.00	
Unit No. 01 Sutter Bypass Levee LB	Overall Unit Rating								
				o are procent, co	life Overal	ı Uriil Kalir	ig is ivi		
ST0002	M *	21.68	instead of A.		tile Overal	ı Uriil Ralir	iy is ivi		
	M *					ement	Design &		
ST0002 Rated Item	M * M Miles		instead of A.			ement	Design 8 Obsole		
Rated Item Earthen Levee	M Miles	Maintena	instead of A. nce Deficiancy M + 4U Miles	Threshold %	Enforc	ement	Design 8 Obsole	scence	
Rated Item Earthen Levee Vegetation		Maintena	instead of A.	, ,	Enforc	ement	Design 8 Obsole	scence	
Rated Item Earthen Levee	M Miles	Maintena	instead of A. nce Deficiancy M + 4U Miles	Threshold %	Enforc	ement	Design 8 Obsole	scence	
Rated Item Earthen Levee Vegetation	M Miles	Maintena	instead of A. nce Deficiancy M + 4U Miles	Threshold %	Enforc	ement U Miles	Design 8 Obsole	scence	
Rated Item Earthen Levee Vegetation Encroachments	M Miles	Maintena U Miles	instead of A. nce Deficiancy M + 4U Miles 0.32	Threshold %	Enforc	ement U Miles	Design 8 Obsole	scence	
Rated Item Earthen Levee Vegetation Encroachments Animal Control Slope Stability Supplemental	0.32 0.03 0.03	Maintena U Miles	instead of A. nce Deficiancy M + 4U Miles 0.32 0.07 0.03	1.48% 0.32% 0.14%	Enforc	ement U Miles	Design 8 Obsole	scence	
Rated Item Earthen Levee Vegetation Encroachments Animal Control Slope Stability	M Miles 0.32 0.03	Maintena U Miles	instead of A. nce Deficiancy M + 4U Miles 0.32 0.07	Threshold % 1.48% 0.32%	Enforc	ement U Miles	Design 8 Obsole	scence	
Rated Item Earthen Levee Vegetation Encroachments Animal Control Slope Stability Supplemental	0.32 0.03 0.03	Maintena U Miles	instead of A. nce Deficiancy M + 4U Miles 0.32 0.07 0.03	1.48% 0.32% 0.14%	Enforc	ement U Miles	Design 8 Obsole	scence	

LMA District Cover Sheet

Fall 2016 Levee Inspection Results

Sutter Maintenance Yard East Levee Sutter Bypass

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)					
† Overall LMA Rating (Fall Only)			M *						
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating. * Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.									
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall. FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.									
Comments									

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles
Unit No. 01 Sutter Bypass Levee	Left	21.68

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	3/23/2016 - 3/23/2016		9/23/2016 - 9/30/2016	
DWR Inspector	Keith Millard		Tariq Chechi	
Accompanied By	Steve Beckley Sutter Maintenance Yard			

^{*} Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start		Rating **	Α	Issue No.		4		
Livi Start						•		
LM End		Issue Type +	Ма	Location * N/A				
Category Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Operation	s & Maintenai	nce		0		0	
item	Manuals				0		0	
DWR ID	DWR_ST00	002_01_s _ 201	3_4					
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
The LMA h	nas the O&	M manuals.						

No Photos

LM Start		Rating **	Α	Issue No.		5	
LM End		Issue Type +	Ma	Location *		N/A	
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item		y Supplies &			0		0
пеш	Equipmen	it			0		0
DWR ID	DWR_ST00	002_01_s _ 201	3_5				
		Comn	nent Coc	de			
		Inspecto	or Comm	nent			
The LMA h	nas flood fi	ght supplies a	ınd equip	oment.			

No Photos

LM Start		Rating **	Α	Issue No.		6		
LM End		Issue Type +	Ма	Location *	N/A			
Category	Earthen L	evee		GPS La	atituc	de/Longitude		
Category				Start		End		
Item	Flood Pre	paredness &	Training		0		0	
пеш					0		0	
DWR ID	DWR_ST00	002_01_s _ 201	3_6					
		Comn	nent Coc	le				
			_					
		Inspecto	or Comm	ent				
The LMA h	nas comple	eted flood fligh	nt training	g.				

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	0.01	Rating **	М	Issue No.		27	
LM End	0.33	Issue Type +	Ma	Location *	cation * LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		39.1511	17°	39.147405°	
item				-121.8319	53°	-121.828543 °	
DWR ID	DWR_ST00	002_01_f _ 201	6_27			·	
		Comn	nent Cod	de			
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	pes a	and	
easements	S.						
		Inspect	or Comm	nent			



View of the annual grass blocking visibility.

Rating ** Issue No. LM Start 0.32 М 41 Issue Type + Location * LS LM End 0.32 En Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 39.147463° 39.147463 ° -121.828716 ° -121.828716 DWR ID

Comment Code

Inspector Comment

FS_ID:50261 DS_ID:16859 EP NO: 4795

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 10/10/2016 Unable to locate.4/18/2016 Unable to locate.5/7/2015 Could not locate a marker for this

crossing.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2103 Same as last inspection.5/22/2013 Same as last inspection. Unable to locate 10/8/2012 Unable to locate any indicator of crossing. More research may be necessary.

FIELD_STRUCT_DESC: 3-inch gas line along the landside (LS) toe. (Permit No. 4795, 1965 - Pacific Gas and Electric Company [PG&E]).

[Additional Reference(s): DWR Levee Log, 2005].

FS Date: 10/11/2016 1:49:47 PM

No Photos

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	1.12	Rating **	М	Issue No.	42		
LM End	1.12	Issue Type +	En	Location *	LS		
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Itom	DWR UCI	P Field Study		39.14086	88°	39.140868°	
пеш	Item			-121.81664	14 °	-121.816644°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:50265 DS_ID:16862 EP_NO: 10932

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 WS CMP riser is still knocked out of place and siphon breaker is suspected to be buried. (DWR Sutter Yard afreitag)4/18/2016 CMP riser is still knocked out of place and a siphon breaker cannot be found.5/7/2015 24in. cmp riser and siphon breaker were not found on the WS shoulder.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 24in. cmp riser was pulled out of levee and there is no sign of a siphon breaker on WS shoulder.5/22/2013 24in. cmp riser on WS shoulder is full of garbage and dirt and should be cleaned out to inspect siphon breaker.10/8/2012 Pier has no walkway to access pump on pier. This is not necessarily an issue.

FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 6.3 feet below the crown. Vertical pump mounted on a steel structure on the bank. Siphon breaker in a 24-inch corrugated metal pipe riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). Power and communication joint pole (JP) on the WS shoulder. Original equipment in O&M. Hand drawings available in permit. Replaced under (Original O&M entry removed in 1975 and replaced under Permit No. 10932, 1976 - Edward Nall) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 1094+80)].

FS Date: 10/11/2016 1:56:34 PM

LM Start	1.12	Rating **	М	Issue No.	42 (cont)
LM End	1.12	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_50265_64805.jpg



Pump on metal pier on WS slope.

Photo 2 of 2: UCIP_FA_2016_50265_64804.jpg



24-inch CMP riser on WS slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	3.54	Rating **	М	Issue No.	30		
LM End	3.54	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		39.120417°		39.120417°	
пеш				-121.7798	63°	-121.779863°	
DWR ID	DWR_ST0002_01_f _ 2015_30						
Comment Code							

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

LM Start	4.14	Rating **	С	Issue No.		28	
LM End	4.14	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Itom	Slope Sta	bility		39.11523	32°	39.115232°	
Item				-121.77096	3°	-121.770963 °	
DWR ID DWR_ST0002_01_s _ 2016_28							

Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Vehicle trafic on slope has deep ruts and ponding of water.

No Photos

LM Start	4.81	Rating **	A/W	Issue No.		26		
LM End	4.81	Issue Type +	Ob	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Cracking			39.1081	10°	39.108110	0	
пеш				-121.7626	23°	-121.762623	0	
DWR ID	DWR_ST0	002_01_f _ 201	5_26					
		Comn	nent Cod	de				
CR1: Mor	nitor and ha	eve inspected	by geote	echnical en	aine	er.	Т	

Inspector Comment

Longitudinal cracks caused by fat clay.



View of the longitudinal cracks.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	5.20	Rating **	С	Issue No.		25			
LM End	5.20	Issue Type +	Ma	Location *		WS			
Category Earthen Levee				GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Slope Sta	bility		39.1033	13°	39.103313°			
item			-121.758813°						
DWR ID	DWR_ST00	002_01_s _ 201	5_25						
		Comn	nent Cod	de					
S3 : Repai access wh		slope damag le.	jed by ve	ehicle traffic	and	d prevent			
		Inspecto	or Comm	nent					
Repair the	Repair the vehicle erosion along the waterside slope.								

No Photos

LM Start	6.60	Rating **	С	Issue No.	31			
LM End	6.60	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thi	n Trees		39.08423	36°	39.084236°		
item						-121.749914°		
DWR ID DWR_ST0002_01_s _ 2016_31								
	Comment Code							

T3 : Trim and thin trees to allow visibility of the ground and room to

flood fight.

Inspector Comment

Fallen dead tree on waterside levee slope.

No Photos

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	7.47	Rating **	М	Issue No.		43
LM End	7.47	Issue Type +	En	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.07229	92 °	39.072292°
пеш				-121.74490)7°	-121.744907°
DWR ID						

Inspector Comment

Comment Code

FS_ID:50287 DS_ID:19985 EP_NO: N/A

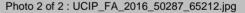
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 No Permit identified for crossing. FIELD_STRUCT_DESC: Gas-line crosses levee at an unknown depth below the crown. Carsonite sign located on the waterside (WS) shoulder and at landside (LS) toe across toe ditch. Line is owned by Calpine Pipeline Company. No permit has been identified since crossing was field discovered in 2012. FS Date: 10/11/2016 2:50:06 PM

LM Start	7.47	Rating **	М	Issue No.	43 (cont)
LM End	7.47	Issue Type +	En	Location *	WS



Gasline marker on WS shoulder.





Gasline marker on LS toe east of ditch.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	7.83	Rating **	A/W	Issue No.		34	
LM End	7.83	Issue Type +	Ма	Location *		WS	
Category	evee	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	Erosion / I	Bank Caving		39.0672	99°	39.067299°	
iteiii				-121.742851 °		-121.742851 °	
DWR ID DWR_ST0002_01_f _ 2016_34							
		Comn	nent Cod	de			
E1 : Note	and monito	or erosion site					
		Inspecto	or Comm	nent			



View of the erosion along the waterside toe

LM Start	8.14	Rating **	М	Issue No.		44
LM End	8.14	Issue Type +	sue Type + En L			WS
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.0629	76°	39.062976°
item				-121.7410	27°	-121.741027°
DWR ID						

Comment Code

Inspector Comment

FS_ID:50288 DS_ID:19984 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last

inspection.10/8/2012 No permit or purpose identified for this crossing. FIELD_STRUCT_DESC: 2.5-inch steel pipe bored under the levee at an unknown depth below the crown. Pipe has locked cap on the landside (LS) toe. Steel I-beam stream crossing on the LS toe mark location of pipe. Waterside (WS) marker of pipe crossing is not identified. No permit has been identified since crossing was field discovered in 2012.

FS Date: 10/11/2016 2:51:00 PM

Photo 1 of 2: UCIP_FA_2016_50288_65215.jpg



Pipe at steel i-beam crossing in ditch at LS toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	8.14	Rating **	М	Issue No.	44 (cont)			
LM End	8.14	Issue Type +	En	Location *	WS			
Category	Suppleme	ental	GPS Latitude/Longitude					
Category				Start		End		
Item	DWR UCI	P Field Study		39.06297	6°	39.062976°		
пеш				-121.74102	7°	-121.741027°		
DWR ID	WR ID							
	Comment Code							

Inspector Comment

FS_ID:50288 DS_ID:19984 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last

inspection.10/8/2012 No permit or purpose identified for this crossing. FIELD_STRUCT_DESC: 2.5-inch steel pipe bored under the levee at an unknown depth below the crown. Pipe has locked cap on the landside (LS) toe. Steel I-beam stream crossing on the LS toe mark location of pipe. Waterside (WS) marker of pipe crossing is not identified. No permit has been identified since crossing was field discovered in 2012.

FS Date: 10/11/2016 2:51:00 PM

Photo 2 of 2 : UCIP_FA_2016_50288_65214.jpg

Pipe at steel i-beam crossing in ditch at LS toe.

LM Start	8.80	Rating **	A/W	Issue No.		35		
LM End	8.80	Issue Type +	Ma	Location *		WS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory		Start		End				
Item	Erosion /	Bank Caving		39.053838°		39.053838°		
item				-121.737247 °		-121.737247 °		
DWR ID	DWR_ST0	002_01_f _ 201	6_35					
		Comn	nent Cod	de				
E1 : Note a	and monito	or erosion site						
	Inspector Comment							



View of the erosion along the waterside toe.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	9.66	Rating **	С	Issue No.		32	
LM End	9.66	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee	GPS La	atitud	e/Longitude		
Category	gory					End	
Item	Trim / Thi	n Trees		39.0420	03°	39.042003	0
Item				-121.732308 °		-121.732308	0
DWR ID	DWR_ST00	002_01_s _ 201	6_32				
		Comn	nent Cod	de			
T3 : Trim a flood fight.	and thin tre	es to allow vis	sibility of	the ground	l and	I room to	
	Inspector Comment						
Fallen Dea	Fallen Dead Tree on Waterside slope.						

No Photos

LM Start	10.28	Rating **	U	Issue No.		45
LM End	10.28	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	DWR UC	IP Field Study		39.0335	22°	39.033522°
пеш				-121.7289	27°	-121.728927°
DWR ID						·

Comment Code

Inspector Comment

FS_ID:50290 DS_ID:16884 EP_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch)

10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard - afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard - afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag)

FIELD_STRUCT_DESC: 1 of 3. 4.5-inch steel natural gas pipe lines through the levee, 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers located on the landside (LS) toe and waterside (WS) shoulder. (Permit No. 14455, 1986 - Depco, Inc.) FS Date: 10/11/2016 2:56:22 PM

Photo 1 of 2: UCIP_FA_2016_50290_65217.jpg



Gasline markers on LS toe

Page 10 of 24

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.28	Rating **	U	Issue No. 45 (cont)		45 (cont)	
LM End	10.28	Issue Type +	En	Location *	on * WS		
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	DWR UCI	DWR UCIP Field Study			22°	39.033522 °	
пеш				-121.72892	27°	-121.728927 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:50290 DS_ID:16884 EP_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch)

UCIP - thatch)

10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard - afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard - afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag)
FIELD_STRUCT_DESC: 1 of 3. 4.5-inch steel natural gas pipe lines

through the levee, 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers located on the landside (LS) toe and waterside (WS) shoulder. (Permit No. 14455, 1986 - Depco, Inc.) FS Date: 10/11/2016 2:56:22 PM

Photo 2 of 2 : UCIP_FA_2016_50290_65216.jpg

Gasline markers on WS shoulder.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.28	Rating **	Rating ** U Is			46
LM End	10.28	Issue Type +	En	Location *	* WS	
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	. DWR UCIP Field Study			39.0335	19°	39.033519°
item				-121.7289	26°	-121.728926°
DWR ID						

Inspector Comment

Comment Code

FS_ID:50291 DS_ID:16899 EP_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch)

10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag)

FIELD_STRUCT_DESC: 2 of 3. 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers located on the landside (LS) toe and waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.)

FS Date: 10/11/2016 3:00:04 PM

LM Start	10.28	Rating **	U	Issue No.	46 (cont)
LM End	10.28	Issue Type +	En	Location *	WS

Photo 1 of 2: UCIP_FA_2016_50291_65219.jpg



Gasline markers on LS toe.

Photo 2 of 2: UCIP_FA_2016_50291_65218.jpg



Gasline markers on WS shoulder.

Location + Issue Type N/A: Not Applicable Ma: Maintenance Deficiancy LS: Land Side Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.28	Rating **	U	Issue No.	ssue No. 47	
LM End	10.28	Issue Type +	En	Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCIP Field Study			39.0335	17°	39.033517°
пеш				-121.7289	25 °	-121.728925°
DWR ID						

Inspector Comment

Comment Code

FS_ID:50292 DS_ID:16900 EP_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch)

10/10/2016 Ćrossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard - afreitag)5/7/2015 Marker on Ws broken. (DWR Sutter Yard - afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag)

FIELD_STRUCT_DESC: 3 of 3. 4.5-inch steel natural gas pipelines through the levee , 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers located on the landside (LS) toe and waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.)

FS Date: 10/11/2016 3:00:24 PM

LM Start	10.28	Rating **	U	Issue No.	47 (cont)
LM End	10.28	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_FA_2016_50292_65224.jpg



Gasline markers on LS toe.

Photo 2 of 2: UCIP_FA_2016_50292_65223.jpg



Gasline markers on WS shoulder.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.83 Rating ** M			Issue No.		48		
LM End	10.83	Issue Type +	En	Location *		WS		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study			39.02569	3°	39.025693	0	
пеш				-121.72689	5°	-121.726895	0	
DWR ID								

Inspector Comment

Comment Code

FS_ID:50299 DS_ID:16871 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Abandoned crossing.4/18/2016 Abandoned crossing but no noticeable issues seen with it.5/7/2015 Abandoned crossing but no noticebale issues with it.11/12/2014

Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment. FIELD_STRUCT_DESC: *ABANDONED* [Pumping Plant No. 2] 1 of 5. 4-foot by 6-foot concrete drainage culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterside (WS) end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station

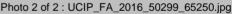
582+19)]

FS Date: 10/11/2016 3:06:52 PM

LM Start	10.83	Rating **	М	Issue No.	48 (cont)
LM End	10.83	Issue Type +	En	Location *	WS



Slide gates on WS shoulder





Flap gates on WS toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.83 Rating ** M		М	Issue No.		49	
LM End	10.83	Issue Type + En		Location *		WS	
Category Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.02568	3°	39.025683	0
пеш				-121.72688	6°	-121.726886	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:50300 DS_ID:16906 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Abandoned crossing but no noticeable issues seen with it.5/7/2015 Abandoned crossing but no noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Determine type of abandonment.

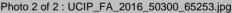
FIELD_STRUCT_DESC: *ABANDONED* [Pumping Plant No. 2] 2 of 5. 4-foot by 6-foot concrete drainage culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterside (WS) end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)]

FS Date: 10/11/2016 3:08:13 PM

LM Start	10.83	Rating **	M	Issue No.	49 (cont)
LM End	10.83	Issue Type +	En	Location *	WS



Slide gates on WS shoulder.





Flap gates on WS toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.84	Rating **	М	Issue No.		50	
LM End	10.84	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory	egory			Start		End	
Item	DWR UC	P Field Study		39.0255	60°	39.025560°	
item				-121.7268	46 °	-121.726846°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:50305 DS_ID:16872 EP_NO: 3165

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Abandoned crossing. (DWR Sutter Yard - afreitag)4/18/2016 Abandoned crossing but no noticebale issues to report.5/7/2015 Abandoned crossing. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment.

FIELD_STRUCT_DESC: *ABANDONED* 10-inch drainage pipe through the levee, 2 feet below the crown. Siphon breaker in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Flap gate on the WS end. Minimalistic design drawings available. (Permit No. 3165, 1959 - State of California Department of Water Resources [DWR]). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/12/2016 7:19:31 AM



Siphon breaker in 36-inch CMP riser on WS shoulder. Pipe visible at siphon breaker.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	10.85	Rating **	М	Issue No.		51	
LM End	10.85	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.0253	10°	39.025310°	
пеш				-121.7267	70°	-121.726770°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:50306 DS_ID:19986 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 10/10/2016 Crossing appears to be in good condition but there is no permit on file.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/9/2012 No permit identified for crossing. FIELD_STRUCT_DESC: Gas-line crosses levee at an unknown depth below the crown. Carsonite sign on both landside (LS) and waterside (WS) shoulder. Line is owned by Calpine Pipeline Company. No permit has been identified since crossing was field discovered in 2012. FS Date: 10/12/2016 7:21:32 AM

LM Start	10.85	Rating **	М	Issue No.	51 (cont)
LM End	10.85	Issue Type +	En	Location *	WS

Photo 1 of 2: UCIP_FA_2016_50306_65266.jpg



Gasline marker on LS shoulder.

Photo 2 of 2: UCIP_FA_2016_50306_65265.jpg



Gasline marker on WS shoulder.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

	40.00	D-6 **		Innua NI				
LM Start	10.88	Rating **	М	Issue No.		1		
LM End	10.91	Issue Type +	Ma	Location *		WS		
Category	Suppleme	ental		GPS La	titud	e/Longitude		
Calegory				Start		End		
Item		15 USACE Erosion Survey,			35°	39.024399°		
item	DRAFT			-121.726929 °		-121.726808 °		
DWR ID	DWR_ST0	002_01_s _ 201	6_1					
		Comn	nent Coo	de				
	Inspector Comment							
2011 - Small section of the mid levee slope has eroded from wind wave. 2015: Site is part of the extended inventory, last inspected 2011. [2015								

No Photos

Rating ** Issue No. LM Start 11.50 С 36 11.50 Issue Type + Location * WS LM End Ма Earthen Levee GPS Latitude/Longitude Category End Start

Trim / Thin Trees 39.016206° 39.016206 -121.724236 -121.724236 DWR ID DWR_ST0002_01_f _ 2016_36

Comment Code

Site ID: SBP_11-1_L]

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

Fallen Dead Tree on Waterside slope.

No Photos

* Location LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	12.94	Rating **	М	Issue No.		52		
LM End	12.94	Issue Type +	En	Location *	WS			
Category			GPS Latitude/Longitude					
Calegory			Start		End			
Item	DWR UCI	P Field Study		38.99630	4 °	38.996304°		
пеш				-121.71629	o°	-121.716290°		
DWR ID								
	Comment Code							

Inspector Comment

FS_ID:50307 DS_ID:16883 EP_NO: 15571

LM Start

LM End

Category

DWR ID

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 10/10/2016 Unable to locate.(DWR Sutter Yard -

afreitag)4/18/2016 Unable to locate.5/7/2015 Unable to locate.11/12/2014 Same as last inspection. Unable to

locate.5/14/2014 Same as last inspection.10/30/2013 Same as last

inspection.5/23/2013 Same as last inspection. Unable to

Rating **

Issue Type +

locate.10/9/2012 Need to determine status of pipeline. Unable to

locate any markers in field.

FIELD_STRUCT_DESC: 10.75-inch steel gas line through the levee, 2 feet below the levee crown. Line was installed within the flowage area and both levees of the Sutter Bypass. Design drawings are available. (Permit No. 15571, 1990 - Hood Corporation)

A/W

Ма

Issue No.

Location *

Start

38.991857 °

-121.711555 °

FS Date: 10/12/2016 7:24:36 AM

13.34

13.34

Earthen Levee

Slope Stability

23			Р	ŀ
WS				
ngitude				
End				
38.991857	0			
21.711555	0			

23

ws

-121.7

GPS Latitude/Longitu

DWR_ST0002_01_s _ 2015_23 Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Repair the erosion along the waterside slope.

hoto 1 of 1: FA_2016_ST0002_450_23_20160823_00004.jpg

No Photos



View of the vehicle erosion along the slope.

Location LS: Land Side N/A: Not Applicable WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	14.71	Rating **	М	Issue No.		37
LM End	14.71	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility	38.9793	89°	38.979389°	
item				-121.691923 °		-121.691923°
DWR ID	DWR_ST00	002_01_f _ 201	6_37			
		Comn	nent Cod	de		
S3 : Repai access wh		slope damaç le.	ed by ve	ehicle traffic	anc	l prevent
		Inspect	or Comm	nent		
Repair the	vehicle er	osion along th	ne waters	side slope.		



View of the erosion caused by vehicle traffic.

LM Start	14.71	Rating **	М	Issue No.		38
LM End	14.71	Issue Type +	Ma	Location *	WS	
Category	evee	GPS La	atitud	e/Longitude		
Calegory		Start		End		
Item	Animal Co	ontrol		38.9793	89°	38.979389°
item				-121.6919	23°	-121.691923°
DWR ID	DWR_ST0002_01_f _ 2016_38					
Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	14.71	Rating **	М	Issue No.	53	
LM End	14.71	Issue Type +	En	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory		Start		End		
Item	DWR UCI	P Field Study		38.9793	77 °	38.979377°
пеш				-121.69192	29°	-121.691929°
DWR ID	R ID					
Comment Code						

Inspector Comment

FS_ID:50311 DS_ID:16875 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Abandoned crossing.(DWR Sutter Yard - afreitag)4/18/2016 Abandoned crossing.5/7/2015 Abandoned crossing. Needs to be properly abandoned.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/23/2013 Same as last inspection.10/9/2012 Pipe has not been abandoned properly. It should be removed from the levee section.

FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 3.5 feet below the crown. Siphon breakers in 30-inch steel risers on both waterside (WS) and landside (LS) shoulders. Vertical pump on pile structure in stream (removed). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 377+10)].

FS Date: 10/12/2016 7:31:23 AM

LM Start	14.71	Rating **	М	Issue No.	53 (cont)
LM End	14.71	Issue Type +	En	Location *	WS



Pipe on WS slope exposed and crushed below 30-inch steel riser.

Photo 2 of 2 : UCIP_FA_2016_50311_65313.jpg



Steel riser on LS shoulder.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	17.60	Rating **	М	Issue No.		21
LM End	17.60	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility		38.9499	65°	38.949965 °
iteiii		-121.653823 ° -121.653				
DWR ID DWR_ST0002_01_s _ 2015_21						
		Comn	nent Co	de		
S3 : Repai access wh		slope damag le.	jed by ve	ehicle traffic	and	prevent
		Inspecto	or Comn	nent		
Repair the	vehicle er	osion along th	e water	side slope.		

noto 1 of 2 :	FA_2016	_ST0002_45	0_21_20160	823_00002.
	× 11.04			
				M/02/2015

View of the vehicle erosion along the waterside slope.

Photo 2 of 2: FA_2016_ST0002_450_21_20160823_00003.jpg



View of the vehicle erosion along the waterside slope.

LM St	art	17.60	Rating **	М	Issue No.	21 (cont)
LM E	nd	17.60	Issue Type +	Ma	Location *	WS

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	19.18	Rating **	tating ** M		Issue No.			
LM End	19.18	Issue Type +	En	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UCI	P Field Study		38.93242	3 °	38.932423	0	
пеш				-121.63508	5 °	-121.635085	0	
DWR ID								

Inspector Comment

Comment Code

FS_ID:50319 DS_ID:16878 EP_NO: 3165

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/10/2016 Abandoned crossing. (DWR Suter Yardafreitag)4/18/2015 Abandoned crossing. No noticeable issues to report.5/7/2015 Abandoned crossing. No noticeable issues to report.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.5/23/2013 Same as last inspection.10/30/2013 Same as last inspection.5/23/2013 Same as last inspection.10/9/2012 Need to determine type of abandonment. FIELD_STRUCT_DESC: *ABANDONED* 10-inch steel drainage pipe through the levee, 4 feet below the crown. Siphon breaker in 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Flap gate on the WS end. (Permit No. 3165, 1959 - State of California Department of Water Resources [DWR]) [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 10/12/2016 7:40:38 AM



36-inch CMP riser on WS shoulder.

LM Start	19.86	Rating **	U	Issue No.	39		
LM End	19.86	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		38.9247	52°	38.924752°	
пеш				-121.6270	68°	-121.627068°	
DWR ID	D DWR_ST0002_01_f _ 2016_39						
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Photo 1 of 2: FA_2016_ST0002_450_39_20161003_00052.jpg



View of a rodent hole with large hammer sitting on top.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

LM Start	19.86	Rating **	U	Issue No.		39 (cont)			
LM End	19.86	Issue Type +	Ma	Location *		LS			
Catagory	Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End			
Animal Control				38.924752°		38.924752°			
item				-121.627068 °		-121.627068°			
DWR ID DWR_ST0002_01_f _ 2016_39									
		Comn	nent Cod	de					
	dents visib or grout bur	le, but rodent rows.	burrows	visible; nee	ed to	backfill and			
		Inspecto	or Comm	nent					



Another view of the rodent hole with large hammer hanging in the hole.

LM Start	20.02	Rating **	М	Issue No.		29			
LM End	20.02	Issue Type +	Ma	Location *		WS			
Category	Catagory Earthen Levee				GPS Latitude/Longitude				
Category				Start		End			
Item	Slope Stability			38.9226	78°	38.922678°			
item				-121.6258	90°	-121.625890°			
DWR ID	DWR ID DWR_ST0002_01_f _ 2015_29								

Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment



View of the vehicle erosion along the waterside slope.

LM Start	20.18	Rating **	С	Issue No.		33	
LM End	20.18	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		38.9204	61°	38.920461	0
пеш				-121.6251	93°	-121.625193	0
DWR ID	DWR_ST0	002_01_s _ 201	6_33				
		Comn	nent Coc	le			

LM Start	20.18	Rating **	С	Issue No.		33		
LM End	20.18	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Category		Start		End				
Item	Trim / Thi	n Trees	38.9204	161° 38.92046				
item				-121.6251	93°	-121.625193		
DWR ID	DWR_ST0	002_01_s _ 201	6_33					
		Comn	nent Cod	le				
T3 : Trim a flood fight.	and thin tre	es to allow vis	sibility of	the ground	l and	d room to		
		Inspecto	or Comm	ent				
Fallen dea	d tree on v	vaterside slop	e.					

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Page 24 of 24

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	09/23/2016 09/30/2016	Tariq Chechi

		1						
LM Start	20.34	Rating **	U	Issue No.		10		
LM End	20.34	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachi	ments		38.9181	47°	38.918147°		
пеш				-121.624545 °		-121.624545 °		
DWR ID DWR_ST0002_01_s _ 2012_10								
		Comn	nent Cod	de				
BU : Build	ing							
Inspector Comment								



View of the house next to the toe of the levee.

LM Start	20.43	Rating **	М	Issue No.		40
LM End	20.43	Issue Type +	Ma	Location *		LS
Catagonia Earthen Levee				GPS La	atitud	e/Longitude
Category			Start		End	
Animal Control			38.9169	65 °	38.916965 °	
item				-121.6240	48°	-121.624048 °
DWR ID DWR_ST0002_01_f _ 2016_40						
		Comn	nent Cod	de		
A1 : Exter	minate rod	ents and back	fill and o	compact or	grou	t burrows.
Inspector Comment						



View of the rodent holes along the landside slope.